

**Commonwealth of Kentucky**

**Division for Air Quality**

**PERMIT STATEMENT OF BASIS**

Title V draft permit, No. V-97-024

**LOUISVILLE GAS AND ELECTRIC TRIMBLE COUNTY STATION**

Bedford, Kentucky 40006

May 29, 2000

Completed by: Christina A. Forgacs

**SOURCE DESCRIPTION, CONTROL EQUIPMENTS & CONSTRUCTION DATE:**

- E. Unit 01: Unit 1: Pulverized coal-fired, dry bottom, tangentially-fired unit equipped with an electrostatic precipitator and wet spray scrubber with lime/limestone injection, construction commenced prior to September 18, 1978.
- E. Units 02: Unit 2: Auxiliary boilers A, B, and C, number two fuel oil-fired units, construction commenced prior to December 28, 1987.
- E. Unit 05: Unit 5: Coal/fossil fuel receiving operations includes continuous and clamshell barge unloaders, two barge unloader bins, and fossil fuel stacker reclaimer equipped with enclosure, surfactant use, and rotoclone, for which construction commenced by 1990; Coal/fossil fuel stockpile operations includes active and inactive piles, emergency stackout conveyor S, two inactive reclaim hoppers equipped with dust water suppressant system, construction commenced by 1990; Plant roadways; construction commenced prior to 1990.
- E. Unit 07: Unit 7: Coal/fossil fuel crushing and conveying operations includes conveyors E, R1, F-1, F-2 and transfer points, two primary crushers, fossil fuel crusher bin equipped with enclosure, surfactant use, and rotoclone, construction commenced by 1990; Coal/fossil fuel processing, conveying and transfer, includes conveyors A, B, C, D, G1, G2, 1, and 2, and transfer points, and fuel blender equipped with partial enclosures, construction commenced by 1990; Coal/Fossil fuel silos including six fossil fuel silos for Unit 1 equipped with a baghouse, construction commenced by 1990.
- E. Unit 10: Units 10: Lime/limestone handling and processing includes clamshell unloader, clamshell barge unloader bin, stockpile/stackout operations, and active and inactive piles equipped with enclosure and wet spray low water surfactant system; construction commenced by 1990.
- E. Unit 12: Unit 12: Lime/limestone handling and processing includes underground crushing operation (one crusher), construction commenced by 1990; Lime/limestone handling and processing, milling operations (two ball mills) equipped with enclosure, construction commenced by 1990.
- E. Unit 14: Unit 14: Lime/limestone handling and processing, conveyors and transfer points (conveyor system, belts K, L, M, N, transfer bin, and inactive reclaim hopper) equipped with partial enclosures, construction commenced by 1990.
- E. Unit 18: Unit 18: Emergency diesel generator with maximum horsepower 150 kW, construction commenced by 1995.
- E. Unit 20: Unit 20: Cooling tower with four pumps, construction commenced by 1990.

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REGULATION APPLICABILITY:

All the applicable regulations to the emission units are listed in the permit. The following regulations are not applicable based on the applicability date of regulation, unit size, and/or definition of an affected facility per the regulation:

Regulations not applicable to Unit 1 due to applicability date or size of unit:

Regulation 401 KAR 59:016, New electric utility steam generating units, incorporating by reference 40 CFR 60, Subpart Da

Regulation 401 KAR 60:042, Standards of performance for industrial-commercial-institutional steam generating units, incorporating by reference 40 CFR 60, Subpart Db

Regulation 401 KAR 60:043, Standards of performance for small industrial-commercial-institutional steam generating units, incorporating by reference 40 CFR 60, Subpart Dc

Regulation not applicable to Unit 2, (Auxiliary boilers A, B, and C) due to applicability date:

Regulation 401 KAR 60:043, Standards of performance for small industrial-commercial-institutional steam generating units, incorporating by reference 40 CFR 60, Subpart Dc

Regulation not applicable to Unit 5 (Coal/fossil fuel receiving operations, and Coal/fossil fuel stockpile operations, and plant roadways) due to definition of affected facility:

Subpart Y does not apply because barge unloader system does not meet definition of affected facility under Subpart Y. Open stockpile operations do not meet the definition of an affected facility under Subpart Y.

Regulation 401 KAR 60:250, Standards of performance for coal preparation plants, adopting by reference 40 CFR 60, Subpart Y. (Barge unloader, unloader bins, and stacker reclaimer are not thermal dryers, or pneumatic cleaning equipments, or coal processing and conveying equipment by definition; these do not convey coal or remove coal from machinery to reduce the size of coal nor do these separate coal from refuse; the stockpiles are open which does not meet definition of coal storage system under Subpart Y, and stackout conveyor S and two inactive reclaim hoppers do not meet the definition of an affected facility)

Regulation not applicable to Unit 10 (Lime/limestone handling and processing) due to definition of an affected facility:

Receiving units and operations and stockpile/stackout operations do not meet the definition of an affected facility under Subpart OOO which therefore does not apply.

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310) because the clamshell unloader and bin, and stockpile operations do not meet the definition of an affected facility - do not include crushers, grinding mills, screening, bucket elevators, belt conveyors, bagging operations, storage bin, or loading station.

REGULATION APPLICABILITY:

Regulations not applicable to Unit 18, Emergency diesel generator:

Subparts D, Da, Db, or Dc do not apply because the diesel generator is an engine not an indirect heat exchanger.

COMMENTS:

- The permittee must comply with the Acid Rain Permit, Number AR-96-07 issued December 19, 1996.
- The permittee has not proposed any alternate operating scenario for the emissions units.
- Unit 1 boiler has Continuous Emission Monitors for sulfur dioxide, nitrogen oxides, and opacity which may be used to assure compliance.
- The permittee will be required, for Unit 1, to conduct one performance test for particulate emissions in the first six months after permit issuance to demonstrate compliance with the allowable standard and to develop the indicator range/upper limit for opacity. The permittee may assure continuing compliance with the particulate standard using continuous opacity monitoring data as an indicator as described in the permit. If no other performance tests for particulates are performed, then a second performance test for Unit 1 will be required in the third year of the permit term.
- See the Permit Application Summary Form for important points to note regarding the three 11.76 MMBTU/hour auxiliary boilers.
- Unit 5, Unit 10, and Unit 20 subject to fugitive emissions Regulation 401 KAR 63:010 and are considered to be in compliance when using control measures required by the regulation.
- Unit 7, Unit 12, Unit 14 have a periodic monitoring requirement to conduct weekly inspections of control equipment making necessary repairs to assure proper maintenance and/or operation of control equipment, and annual Method 9 opacity readings or Method 22 testing as appropriate to assure compliance.
- Unit 18 emergency diesel generator is not subject to any applicable requirements, and is an engine, not an indirect heat exchanger.
- The permittee shall submit a compliance assurance monitoring (CAM) plan for applicable emissions units with an application for significant revision or with the application for the Title V permit renewal.